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ABSTRACT

"Industrial policy" is an ambiguous term; however, diverse elements of our society can agree that "industrial policy" can be thought of as a combination of all the policies and practices that affect or are the consequences of a nation's ability to compete--policies and practices in the areas of international trade, capital investment, technological innovation, and human resources. Our primary thrust toward an industrial policy at present is the recognition that the United States must increase its industrial productivity. Before productivity can be increased, the following facts must be faced: (1) we are moving into a new economic era, one characterized by emphasis on information/high-technology/service industries; (2) productivity in this country has been too low for nearly 10 years; (3) a high-quality education is the essential foundation upon which this new economic era will be constructed; and (4) the American educational system is in trouble with too many functional illiterates and too many high school graduates who cannot read and add. Human resources are our raw materials for creating a new industrial order; therefore, our educational system must do a better job of preparing students for it. The present administration is attacking the problems in American education by reducing government regulations, emphasizing more basic and applied research, and emphasizing quality education and retraining. Recent grants have been made for projects to determine how technology can be used to improve education. Demonstration projects and "lighthouse" projects will be conducted to show how schools can use computers; the television show "3-2-1 Contact" has been funded, and studies of computer use in the classroom have begun. If our nation's productivity and competitiveness are to increase, an improvement in the educational system is necessary. (KC)

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"INDUSTRIAL POLICY: IMPLICATIONS FOR AMERICAN EDUCATION"

DELIVERED BY

DR. ROBERT M. WORTHINGTON

ON BEHALF OF

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U.S. SECRETARY OF EDUCATION

NATIONAL FOREIGN TRADE COUCIL FOUNDATION/BUSINESS WEEK SEMINAR
"UNDERSTANDING INDUSTRIAL POLICY - BEYOND THE WORDS"

OCTOBER 19, 1983 -- 10:30 A.M.
L'ENFANT PLAZA HOTEL -- WASHINGTON, DC

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THANK YOU JOHN FOR THAT KIND INTRODUCTION. I AM PLEASED TO BE HERE AND APPRECIATE THE OPPORTUNITY YOU HAVE GIVEN ME TO SHARE SOME OF MY THOUGHTS ON WHAT EDUCATION IN GENERAL AND THE DEPARTMENT OF EDUCATION IN PARTICULAR CAN DO TO HELP MAKE AMERICA ONCE AGAIN MORE INVENTIVE, PRODUCTIVE AND COMPETITIVE.

I HAVE SEVERAL MINOR RESERVATIONS ABOUT THE CONFERENCE THEME AND THE TOPIC ASSIGNED TO ME.

- I CANNOT SPEAK FOR THE ENTIRE FEDERAL GOVERNMENT, ONLY THE DEPARTMENT OF EDUCATION, AND EVEN THEN I SOMETIMES HAVE SERIOUS DOUBTS AND RESERVATIONS.

- WE IN EDUCATION AND IN AMERICA HAVE A HEAP OF ILLITERACY TO OVERCOME. I WOULD LIKE TO BEGIN AT THE BEGINNING WITH THE FUNDAMENTALS WE CALL THE "NEW BASICS" AND INCLUDE TECHNOLOGICAL ILLITERACY AS WE GO ALONG.

- HAVING SAID THAT, LATER ON I WILL LIST SOME OF THE SPECIFIC STEPS THE DEPARTMENT OF EDUCATION IS TAKING TO <u>REVERSE THE SLIDE INTO TECHNOLOGICAL ILLITERACY</u>.

- AND IN WHAT ONE MIGHT CONSIDER A <u>POLITICAL CAVEAT</u> OF SORTS - I WOULD LIKE TO RESERVE JUDGMENT ON THE VERY NOTION OF AN "INDUSTRIAL POLICY." I'VE HAD TOO MUCH, FAR TOO MUCH DEALINGS WITH ALL MANNERS OF BUREAUCRATS - IN AND OUT OF GOVERNMENT TO PREFER <u>THEM</u> AND <u>THEIR</u> SOLUTIONS TO THE WORKINGS OF THE FREE MARKET AND FREE ENTERPRISE SYSTEM.

I TEND AT THIS POINT IN OUR UNDERSTANDING OF THIS NEW WASHINGTON "BUZZ WORD" TO GO ALONG WITH MY FRIEND ED HARPER'S RESERVATION THAT "INDUSTRIAL POLICY HAS ALL THE POTENTIAL OF BECOMING A BUREAUCRATIC NIGHTMARE."

CONSEQUENTLY, FOR THIS MORNING'S PRESENTATION I SHALL TAKE SERIOUSLY THE WORDS IN YOUR BROCHURE THAT "FOR THE PURPOSE OF THE CONFERENCE, WE ARE ASSUMING THAT 'INDUSTRIAL POLICY' IS A COMBINATION OF ALL THE INDIVIDUAL POLICIES AND PRACTICES, WHICH AFFECT, OR ARE THE CONSEQUENCES OF A NATION'S ABILITY TO COMPETE - POLICIES AND PRACTICES IN THE AREAS OF INTERNATIONAL TRADE, CAPITAL INVESTMENT, TECHNOLOGICAL INNOVATION AND HUMAN RESOURCES."

YOU ARE FAMILIAR WITH TWO RELATED EVENTS WHICH SPEAK SPECIFICALLY TO THE CONCERNS FOR INCREASED COMPETENCY, COMPETITION AND PRODUCTIVITY.

- THE WHITE HOUSE CONFERENCE ON PRODUCTIVITY

- THE NATIONAL COMMISSION ON INDUSTRIAL COMPETITIVENESS

BOTH OF THESE INITIATIVES ARE IN PRESIDENT REAGAN'S WORDS, "IDEALLY SUITED TO LEAD US IN A NATIONAL DIALOGUE" ON WAYS TO STRENGTHEN U.S. COMPETITIVENESS AND PRODUCTIVITY AT HOME AND ABROAD.

LYING BEHIND BOTH OF THESE INITIATIVES IS A GROWING NATIONAL CONSENSUS, TRIGGERED IN LARGE PART BY THE RELEASE LAST APRIL OF THE REPORT, "A NATION AT RISK: THE IMPERATIVE FOR EDUCATIONAL REFORM," BY THE NATIONAL COMMISSION ON EXCELLENCE IN EDUCATION.

I UNDERSTAND THAT MANY OF THE ADVOCATES OF INDUSTRIAL POLICY TALK IN JARGON TERMS - A LOT OF EDUCATORS ARE AS NOTORIOUS AS ECONOMISTS IN DREAMING UP CONFUSING WORDS AND PHRASES THAT MASK THEIR REAL MOTIVES.

SOME NEW WORDS ASSOCIATED WITH THE SO-CALLED CONSENSUS AMONG THE PURVEYORS OF THIS NEW ECONOMIC PANACEA CALLED "INDUSTRIAL POLICY" ARE, "RESTRUCTURING," "TARGETING," "WORKER RETRAINING" AND "INFRASTRUCTURE RECONSTRUCTION." WELL YOU KNOW WHAT? WHEN APPLIED TO EDUCATION OR HUMAN RESOURCES AS HUMAN CAPITAL, THEY SEEM TO BE INTEGRAL PARTS OF THE BROAD NEW EDUCATIONAL CONSENSUS THAT IS RAPIDLY DEVELOPING AROUND REFORMS NEEDED TO 'SHAPE UP' THE EDUCATIONAL INFRASTRUCTURE UPON WHICH ALL OUR ECONOMIC, POLITICAL, AND SOCIAL INSTITUTIONS ULTIMATELY DEPEND.

FIRST LET ME MENTION THREE SHORT QUOTATIONS FROM OLD FASHIONED "CONSERVATIVE" THINKERS AND ECONOMISTS THAT RELATE TO THAT MOST PRECIOUS OF ALL RESOURCES - THE INDIVIDUAL HUMAN MIND AND ITS EDUCATION, TRAINING AND RETRAINING.:

o "THE MOST VALUABLE OF ALL CAPITAL IS THAT INVESTED IN HUMAN BEINGS." ALFRED MARSHALL

o "EDUCATION IS THE CHEAP DEFENSE OF NATIONS" EDMUND BURKE

o "THE SKILL, DEXTERITY, AND KNOWLEDGE OF A NATION'S PEOPLE IS THE MOST POWERFUL ENGINE OF ITS ECONOMIC GROWTH." ADAM SMITH

I AM PLEASED TO REPORT HERE THIS MORNING THAT A TYPICALLY BI-PARTISAN AMERICAN CONSENSUS IS RAPIDLY DEVELOPING THROUGHOUT OUR LAND. THIS CONSENSUS FINDS AMERICAN EDUCATION AT THE VERY HEART - OR AT THE ROOT, OF A SOCIETY IN TRANSITION FROM AN OLD INDUSTRIAL BASE TO A NEW INFO-HIGH-TECH-SERVICE AGE. AND WHILE THE CONDITION OF AMERICAN EDUCATION HAS BEEN FOUND TO BE WANTING, TO BE MEDIOCRE AND NEEDING A TRANSFORMATION - A REVITALIZATION ALL ACROSS THE BOARD FROM PRE-SCHOOL TO CONTINUING, LIFE-LONG LEARNING, THERE IS EVERY REASON TO BE OPTIMISTIC FOR THE FUTURE.

YOU ARE PROBABLY ALREADY AWARE OF THE 6 INTER-RELATED ASPECTS OF THIS AMERICAN CONSENSUS SO I WILL ONLY QUICKLY MENTION THEM

I. WE ARE MOVING INTO A NEW ECONOMIC ERA; AS PRESIDENT REAGAN HAS SO FREQUENTLY OBSERVED, "WE'RE STEPPING INTO A NEW ECONOMIC ERA AND ONE OF THE MOST CHALLENGING AND EXCITING DECADES IN OUR HISTORY. HIGH TECHNOLOGY IS REVOLUTIONIZING OUR INDUSTRIES, RENEWING OUR ECONOMY, AND PROMISING NEW HOPE AND OPPORTUNITY IN THE YEARS AHEAD." (FEB. 14, 1983)

II. THIS NEW ECONOMIC ERA WILL BE CHARACTERIZED BY ITS EMPHASIS ON INFORMATION-HIGH-TECH-SERVICE INDUSTRIES. BUT AS DR. EDWARD E. DAVID, JR. HAS STATED, "THE TRUTH IS, TO COMPETE IN THE 80'S VIRTUALLY EVERY MAJOR INDUSTRY, WHETHER HIGH TECH OR SMOKESTACK, WILL HAVE TO IN FACT BE HIGH TECH ... AND FOR COMPANIES AND COUNTRIES IN THE INTENSELY COMPETITIVE YEARS AHEAD, SUCCESS WILL DEPEND AT LEAST AS MUCH ON INTEGRATED EFFORTS TOWARD THAT GOAL AS AN INTEGRATED CIRCUIT."

III. AMERICAN PRODUCTIVITY IN MANUFACTURING IS MUCH TOO LOW AND HAS BEEN SO FOR NEARLY A DECADE AND NO ONE IS EXACTLY SURE WHY, HENCE THE CREATION OF THE NATIONAL PRODUCTIVITY ADVISORY COMMITTEE APPOINTED BY PRESIDENT REAGAN ON NOV. 10, 1981.

- o FROM 1960 TO 1973 WE EXPERIENCED AN AVERAGE ANNUAL PRODUCTIVITY GROWTH RATE OF 3.0% IN MANUFACTURING.

- o FROM 1973 TO 1981 PRODUCTIVITY ONLY GREW AT AN ANNUAL RATE OF 1.5%.

o AND MOST RECENTLY, FROM 1981 TO 1982 OUR GROWTH RATE ACTUALLY REVERSED ITSELF TO -1.0% AND WE FORTUNATELY BOTTOMED OUT. THE MOST RECENT FIGURES INDICATE THAT WE ARE ON THE MEND AGAIN THE ECONOMY IS TRULY BEGINNING TO "SPARKLE."

WE ALL KNOW THAT PRODUCTIVITY IS THE FUNDAMENTAL FACTOR IN DETERMINING OVERALL LIVING STANDARDS. AS BARRY BOSWORTH OF BROOKINGS INSTITUTE EXPLAINED: "WITHOUT PRODUCTIVITY GAINS ANY IMPROVEMENT IN ONE PERSON'S ECONOMIC WELL-BEING MUST BE AT SOMEONE ELSE'S EXPENSE."

IV. A HIGH QUALITY EDUCATION IS THE BEDROCK, THE ESSENTIAL FOUNDATION UPON WHICH THIS NEW ECONOMIC ERA WILL BE CONSTRUCTED. AS THE COMMISSION ON EXCELLENCE SAID:

> "KNOWLEDGE, LEARNING, INFORMATION AND SKILLED INTELLIGENCE ARE THE NEW RAW MATERIALS OF INTERNATIONAL COMMERCE;" THEY ARE IN FACT THE INTELLECTUAL KEYS TO AN INFORMATION AGE AND A LEARNING SOCIETY THAT WE ARE ENTERING. THE FUTURE WILL BELONG TO THE BRIGHT AND ENERGETIC PEOPLE RESIDING IN COUNTRIES WHERE LEARNING IS CHERISHED AND ENCOURAGED AND, WHERE SKILLED INTELLIGENCE IS AVAILABLE IN RICH ABUNDANCE. "HISTORY, THE COMMISSION REPORT REMINDS US, "IS NOT KIND TO IDLERS." IF WE DON'T TAKE HEROIC STEPS, OUR INDUSTRIALIZED -URBAN SOCIETY COULD GO THE WAY OF OTHERS IN THIS CENTURY, A SECOND RATE 'HAS BEEN' COUNTRY. WE WILL BE SURPASSED BY OUR COMPETITORS WHO ARE WILLING TO WORK HARDER, STUDY MORE DIFFICULT SUBJECTS AND APPLY INTELLIGENCE TO THE PROBLEMS OF OUR TIME WITH THE DILIGENCE AND INGENUITY ONCE CONSIDERED AN AMERICAN MONOPOLY."

V. <u>BUT THE AMERICAN EDUCATIONAL ENTERPRISE IS IN TROUBLE:</u> I'M NOT GOING TO REVIEW ALL THE DISCOURAGING STATEMENTS CONCERNING THE LACK OF EDUCATIONAL ACHIEVEMENT BY OUR YOUTH WHICH HAVE BECOME ALL TOO FAMILIAR. RATHER I'D JUST LIKE TO ASK 4 RHETORICAL QUESTIONS:

1. WHY DO OUR MILITARY SERVICES HAVE TO REWRITE THEIR TECHNICAL MANUALS TO AN 8TH GRADE LEVEL AND EVEN TO 6TH GRADE STANDARDS? WHY IS THE ARMY DRIVEN TO THE USE OF COMIC BOOKS IN THEIR INSTRUCTION?

2. WHY DOES AMERICAN BUSINES HAVE TO SPEND BILLIONS EACH YEAR EDUCATING, TRAINING AND RETRAINING THE PRODUCTS OF OUR HIGH SCHOOLS AND COLLEGES?

3. WHY DO AMERICAN COLLEGES AND UNIVERSITIES OFFER SO MANY REMEDIAL COURSES IN THE NEW 6 R'S - "REMEDIAL READING, REMEDIAL RIGHTING, AND REMEDIAL RITHMATIC...?"

4. WHY ARE THERE ABOUT 23,000,000 FUNCTIONAL ILLITERATES IN OUR NATION?

VI. <u>IS IT ANY WONDER THEN WHY AMERICA'S VERY FUTURE IS AT RISK AND THAT THE EDUCATIONAL SYSTEM MUST BE REFORMED AND REVITALIZED</u>?

INDEED 8 PRESTIGIOUS BLUE-RIBBON COMMISSIONS HAVE COME TO THAT CONCLUSION.

CONSEQUENTLY I HAVE CALLED A NATIONAL CONFERENCE TO BE CONVENED ON DECEMBER 6 IN INDIANAPOLIS. THIS WILL BE A NATIONAL FORUM ON EXCELLENCE IN EDUCATION BRINGING TOGETHER STATE AND LOCAL OFFICIALS, STATE AND LOCAL SCHOOL BOARD MEMBERS, EDUCATORS IN PUBLIC AND PRIVATE SCHOOLS, BUSINESS AND CIVIC LEADERS, FEDERAL LEGISLATIVE AND EXECUTIVE OFFICIALS, AND THE INTERESTED PUBLIC. IT WILL PROVIDE A USEFUL ARENA FOR THE EXCHANGE OF IDEAS. IT WILL BE HELPFUL IN PREPARING STATE LEGISLATION, PROGRAMS, AND POLICIES AND IN INITIATING PROGRAMS FOR EXCELLENCE AT OUR SCHOOLS, COLLEGES, AND UNIVERSITIES. AND IT WILL BE HELPFUL FOR SUGGESTING WAYS THAT AMERICAN BUSINESS AND INDUSTRY CAN CREATE EVEN MORE PARTNERSHIPS IN EDUCATION.

PRESIDENT REAGAN IS KEENLY AWARE OF THE NEED FOR SOME DRAMATIC CHANGES IN AMERICAN EDUCATION. HE KNOWS THAT OUR COMPETITIVE EDGE IN A VERY COMPETITIVE INTERNATIONAL ECONOMY IS DEPENDENT UPON OUR PRODUCTIVITY - AND OUR PRODUCTIVITY IN THE WORLD TODAY AND TOMORROW, IS LINKED TO SKILLED INTELLIGENCE, CREATIVITY, KNOWLEDGE AND ENLIGHTENMENT -- "THE KNOWLEDGE WORKERS" OF THE FUTURE. WE ALL KNOW NOW THAT WE CANNOT PERMIT OUR SCHOOLS TO REMAIN AS THEY ARE.

THIS IS WHY THE PRESIDENT IS SPEAKING OUT ON EDUCATION. YOU WILL HEAR MORE OF THIS IN THE MONTHS AHEAD. I AM CONVINCED THAT EDUCATION WILL BE A MAJOR ISSUE IN THE 1984 ELECTION. I AM ALSO CONCERNED THAT THE SOLUTION IS NOT SIMPLY A MATTER OF MORE MONEY. INDEED, THE REPUBLICAN POINT OF VIEW AND THE CONTRASTING DEMOCRATIC POSITIONS WILL SURELY HEIGHTEN THE DEBATE AS WE MOVE INTO THE ELECTION SEASON. AND ALL OF THIS IS BOUND TO BE GOOD FOR AMERICAN EDUCATION! I WELCOME ALL THE ATTENTION TO MY FAVORITE - AND THE MOST IMPORTANT TOPIC FOR THE NATION'S ECONOMIC WELL BEING AND AMERICA'S NATIONAL SURVIVAL - THE QUALITY EDUCATION OF OUR PEOPLE.

I AM CONVINCED, ALTHOUGH I AM, GOD-BE-THANKED, NO ECONOMIST AND ONLY AN OLD FASHIONED EDUCATOR, THAT ALFRED MARSHALL, EDMUND BURKE AND ADAM SMITH WERE ABSOLUTELY RIGHT WHEN THEY SAID: HUMAN CAPITAL IS THE MOST IMPORTANT RAW MATERIAL AND NATURAL RESOURCE A NATION POSSESSES. AND THE EDUCATIONAL PROCESS IS THE WAY BY WHICH THAT RAW MATERIAL IS CONVERTED TO NATIONAL POWER, WEALTH AND HUMAN HAPPINESS.

FURTHER I BELIEVE THAT ONE OF THE REASONS FOR THE DECLINE IN AMERICAN PRODUCTIVITY THESE LAST 10 YEARS HAS BEEN RELATED TO THE SLOW BUT STEADY DETERIORATION OF THE AMERICAN EDUCATIONAL SYSTEM OVER THE LAST QUARTER CENTURY. THE SOCIETAL TURMOIL OF THE 60'S AND 70'S HAVE BORN SOME BITTER FRUIT AS THE GOOD BOOK SAYS, QUOTE THE FATHERS HAVE EATEN SOUR GRAPES AND SET THEIR CHILDREN'S TEETH ON EDGE..

PRESIDENT REAGAN BELIEVES AND I WOULD TEND TO AGREE WITH HIS ANALYSIS THAT OUR GENERATION, SEARED BY THE GREAT DEPRESSION AND WORLD WAR II, HAD A TENDENCY TO MAKE LIFE EASIER FOR OUR CHILDREN THAN WE HAD HAD IT. WE ASKED LESS OF THEM THAN THE CHALLENGING TIMES DEMANDED OF US AND WE UNFORTUNATELY GOT IT.

JUST AS THERE IS NO QUESTION THAT THE FACTORS INVOLVED IN THE INCREASE OR DECREASE OF NATIONAL PRODUCTIVITY ARE VERY COMPLEX, IT IS EQUALLY TRUE THAT NO ONE SECTOR OF OUR SOCIETY IS BY ITSELF GOING TO BE ABLE TO TURN AROUND OUR SMALL OR NEGATIVE GROWTH RATE OF THE LAST DECADE.

THERE IS GROWING CONSENSUS THAT MANY ACTIONS MUST BE TAKEN TO INCREASE NATIONAL PRODUCTIVITY - AND THIS ADMINISTRATION HAS MADE AN IMPRESSIVE START IN ATTACKING THE STRUCTURAL AND LONG RANGE PROBLEMS SUCH AS:

- LESS BURDENSOME GOVERNMENTAL REGULATIONS AT ALL LEVELS
- THE NEED TO GENERATE MORE INVESTMENT CAPITAL
- MORE BASIC AND APPLIED RESEARCH
- AND THE EMPHASIS ON UPGRADING OUR HUMAN RESOURCES THROUGH QUALITY EDUCATION, TRAINING AND RETRAINING.

RECENTLY WE HAVE BEEN ENCOURAGING THE PUBLIC TO "REMEMBER INFLATION". AS PRESIDENT REAGAN RECALLED JUST THE OTHER DAY "AND NOW THAT INFLATION HAS BEEN REDUCED TO 2.6% PERCENT AND THE ECONOMY IS ON THE MOVE AGAIN, I'M JUST WONDERING WHERE ARE ALL THOSE FOLKS WHO KEPT INSISTING THAT REAGANOMICS WOULD LEAD TO CRIPPLING RECESSION OR RUNAWAY INFLATION. IN FACT, HOW COME NO ONE CALLS IT 'REAGANOMICS' ANYMORE? I NEVER DID CALL IT THAT. THAT WAS THEIR NAME WHEN THEY THOUGHT IT WOULDN'T WORK. I JUST CALLED IT 'COMMON SENSE.'" THAT MEANS OUR NEW ECONOMIC GROWTH IS REAL AND SUSTAINABLE. IT'S THE KIND OF STEADY, SOLID GROWTH THAT DOUBLED AMERICA'S STANDARD OF LIVING IN EVERY GENERATION FOR A HUNDRED YEARS.

WHAT SPECIFICALLY IS THE DEPARTMENT DOING TO STOP THIS "SLIDE INTO TECHNOLOGICAL ILLITERACY?"

1. THE NATIONAL INSTITUTE OF EDUCATION HAS AWARDED A $7,682,000 CONTRACT TO HARVARD UNIVERSITY TO ESTABLISH AND OPERATE DURING THE NEXT FIVE YEARS THE INSTITUTE'S NEW SCHOOL TECHNOLOGOY CENTER. THE CENTER WILL CONDUCT MAJOR RESEARCH FOR DETERMINING HOW TECHNOLOGY CAN BE USED TO IMPROVE SCIENCE, MATH AND COMPUTER EDUCATION ACROSS AMERICA.

2. WE HAVE CALLED FOR PROPOSALS FOR SCHOOL BASED TECHNOLOGY PROJECTS THAT WILL DEMONSTRATE WHAT CAN NOW BE ACCOMPLISHED IN THE CLASSROOM, WITH EXISTING TECHNOLOGY, TO IMPROVE TEACHING OF SCIENCE, MATH, READING AND WRITING IN ELEMENTARY AND SECONDARY SCHOOLS. WE ESTIMATE THAT TEN, GEOGRAPHICALLY DISPERED PROJECTS WILL BE FUNDED.

3. IN FY 1983, THE NATIONAL DIFFUSION NETWORK EXPECTS TO FUND TEN "LIGHTHOUSE" PROJECTS. THESE ARE SCHOOLS OR SCHOOL DISTRICTS THAT DEMONSTRATE THE USE OF COMPUTERS AND OTHER ADVANCED TECHNOLOGIES IN INSTRUCTIONAL SETTINGS. LIGHTHOUSE SITES PROVIDE BOTH OBSERVATION AND TRAINING IN PLANNING, DESIGNING, AND IMPLEMENTING COMPUTER TECHNOLOGY.

4. THE DEPARTMENT HAS SUPPORTED, TOGETHER WITH NSF, THE MAJOR CHILDREN'S SCIENCE TELEVISION SHOW, "3-2-1 CONTACT." THE SERIES, TARGETED AT 8-12 YEAR OLDS AND DESIGNED FOR HOME AND SCHOOL VIEWING, SEEKS TO INTEREST YOUNG PEOPLE, PARTICULARLY GIRLS AND MINORITY STUDENTS, IN SCIENCE CAREERS. THE SECOND SEASON OF THE SERIES PREMIERED ON OCTOBER 17.

5. WE HAVE BEGUN RESEARCH STUDIES OF COMPUTER USE IN THE CLASSROOM, OF TEACHER TRAINING NEEDS FOR COMPUTER USE, AND OF STUDENT LEARNING OF COMPUTER LANGUAGES.

CONCLUSION

IT IS CLEAR TO ME THAT THE INCREASE OF OUR NATION'S PRODUCTIVITY AND INTERNATIONAL COMPETITIVENESS AND THE IMPROVEMENT OF OUR EDUCATIONAL ENTERPRISE MUST GO HAND IN HAND. THIS IS DUE TO THEIR LARGELY UNAPPRECIATED SYMBIOTIC RELATIONSHIP.

MY 40 YEARS IN EDUCATION HAS CONVINCED ME THAT AMERICAN EDUCATION IS NOW WILLING TO ENGAGE IN A PARTNERSHIP WITH BUSINESS, INDUSTRY, LABOR, AND GOVERNMENT TO MAKE THE AMERICAN EDUCATIONAL SYSTEM THE WORLD'S FINEST AGAIN BY THE TIME THE DECADE IS OVER. IT'S A GOAL ALL AMERICANS CAN AGREE WITH. IT IS ONE THAT WILL TAKE THE COOPERATION OF ALL OF US TO ACHIEVE.

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